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# **Intimate partner violence and ways of coping with stress: cross-sectional survey of female patients in Russian general practice**

Natalia V. Lokhmatkina<sup>1</sup>, Roxane Agnew-Davies<sup>1</sup>, Ceire Costelloe<sup>2</sup>, Olga Yu. Kuznetsova<sup>3</sup>, Irina M. Nikolskaya<sup>4</sup>, Gene S. Feder<sup>1</sup>

<sup>1</sup> Centre for Academic Primary Care, School of Social and Community Medicine, University of Bristol, Bristol, UK

<sup>2</sup> Centre for Primary Care and Public Health, Queen Mary University of London, London, UK

<sup>3</sup> Department of Family Medicine, North Western State Medical University of I.I.Mechnikova, St Petersburg, Russian Federation

<sup>4</sup> Department of Paediatric Psychiatry, Psychotherapy and Medical Psychology, North Western State Medical University of I.I.Mechnikova, St Petersburg, Russian Federation

Correspondence: Dr N.V. Lokhmatkina, Centre for Academic Primary Care, School of Social and Community Medicine, University of Bristol, 39 Whatley Road, Bristol, BS8 2PS, UK,  
Nat.Lokhmatkina@bristol.ac.uk

## **Abstract**

**Background.** Despite WHO guidelines on health service responses to intimate partner violence against women (IPV) general practitioners often overlook the problem. Training on IPV addresses general practitioners' barriers to asking women patients about abuse and responding appropriately. One of the barriers is stereotype of women as passive victims. Little is known about coping behavior of women patients with a history of IPV.

**Objectives:** 1) to compare problem- and emotion-focused coping used by patients who have experienced IPV with those who have not; 2) to examine whether greater coping resources (health, education, employment, and income) would be associated with more problem-focused coping.

**Methods.** The Russian Ways of Coping Questionnaire was administered to every fifth woman who participated in a cross-sectional survey on IPV prevalence in 24 St Petersburg surgeries. Linear regression was used ( $n = 159$ ) to test associations between life-time IPV, coping resources, and ways of coping.

**Results.** Mean problem-focused coping scores were 0.2-4.7 units higher in those patients who have experienced IPV compared to those who have not (95% CI -4.2, 11.9;  $p = 0.16-0.92$ ), while mean emotion-focused coping scores were 2.5-4.2 units higher (95% CI -3.0, 11.0;  $p = 0.12-0.57$ ). After adjustment for coping resources there was no evidence for an association between IPV and problem-focused coping.

**Conclusions.** Patients who have experienced IPV use as much problem-focused and emotion-focused coping, as those patients who have not experienced IPV. These findings should be incorporated into training on IPV to address general practitioners' stereotypes towards patients who have experienced IPV.

## **Keywords**

Intimate partner violence, partner abuse, domestic violence, general practice, coping behavior, women.

## **Background**

Intimate partner violence (IPV) is a common and hidden problem for women attending general practice. Cross-sectional surveys of female patients in the UK, Ireland, Australia and Russia found prevalence of life-time IPV between 37 and 41% (1, 2). Abuse/violence in intimate relationships is a chronic stress, which survivors describe as traumatic, uncontrollable, posing threat to their physical and social self (3). Exposure to chronic stress markedly increases vulnerability to adverse medical outcomes. IPV results in significant morbidity and disability among women with the biggest impact on their reproductive and mental health (4, 5), causing high utilisation of primary care (6). General practice is a major setting for the identification of women experiencing IPV, but there is still uncertainty about effective clinical responses (7). According to WHO guidelines, health professionals

should provide assistance for victims and survivors of IPV by facilitating disclosure; offering support and referral; providing the appropriate medical services and follow-up care; or gathering forensic evidence, particularly in cases of sexual violence. However most clinicians have no training on IPV, fail to identify patients experiencing abuse, and are uncertain about management after disclosure (8). Training programmes on IPV increase general practitioners' knowledge and awareness about the problem (9, 10), improve referral to specialist domestic violence agencies and recorded identification of women experiencing IPV (7). These programmes focus on addressing the barriers to asking women patients about abuse and responding appropriately. One of many barriers stems from social stereotype of women as passive victims, who do not take appropriate action after being offered help/advice (8, 11). We set out to challenge this stereotype by exploring ways of coping with stress used by patients who have experienced IPV.

The current study applies the transactional model of stress and coping of Lazarus and Folkman to explore how patients with experience of IPV cope with stressful situations involving their intimate partners. According to the model, coping is "the cognitive and behavioral efforts to manage specific external and/or internal demands appraised as taxing or exceeding the resources of the individual" (12), p.141). Two general ways of coping have been distinguished: active problem-focused coping which is directed towards changing a stressful situation, and avoidance emotion-focused coping which is aimed at changing the way one thinks or feels about a stressful situation. Personal, material and social resources all contribute to a choice of ways of coping with stress (12). Results of meta-analysis in nonclinical samples revealed that problem-focused coping was positively correlated with overall health outcomes, whereas emotion-focused coping was negatively correlated with overall health outcomes (13).

The coping literature on IPV victims/ survivors is limited, based on convenience samples from domestic violence services, and applies different measures of coping (14). Research findings on the associations between IPV and problem-focused/emotional-focused coping are inconsistent. Some researchers have found a direct relationship between IPV and emotion-focused coping (15-17), whereas others have reported a direct association between IPV and problem-focused coping (18, 19). Taft et al (20) and Lilly et al (21) have found that more severe abuse is associated with more emotion-focused coping. In two studies psychological IPV has been associated with more problem-focused

coping, whereas physical abuse has been associated with more emotion-focused coping (22, 23). However one study has reported that psychological abuse is positively associated with the use of both emotion-focused and problem-focused coping (23), and another has reported that physical abuse leads to more problem-focused coping (24). Taft et al (24) have found that sexual abuse results in increase in emotion-focused coping. Lewis et al (22) argue that problem-focused coping, traditionally considered adaptive, may be unsafe for abused women.

Three studies have investigated the associations of coping resources and way of coping. In one study greater personal and material resources have been associated with more problem-focused coping (18). Other research has found that higher personal income is associated with less problem-focused coping (20) and that the level of education is negatively associated with both problem- and emotion-focused coping (19). However, domestic violence advocates share a general understanding of the survivors' coping behavior as following: (a) women are logical and assertive in their response to IPV; (b) they respond to the abuse by making active help-seeking efforts that are largely unmet; and (c) if the women stay in the abusive relationship, it is for lack of knowledge about their options, financial constraints, or due to the inadequacy of intervention efforts (25).

There has been little research on ways of coping with stress in patients with a history of IPV when they attend general practice seeking help for their health problems (16). The aim of the current study was to improve understanding of coping behavior of female patients who had experienced IPV in order to inform health practitioners and help them be more supportive when identifying and responding to IPV. This study had two main objectives. The first objective was to explore whether life-time experience of IPV would be associated with ways of coping used by women. We hypothesised that patients with experience of IPV would use problem-focused and emotion-focused coping as often as women without experience of IPV. The second objective was to test whether coping resources would change the relationship between IPV and ways of coping. We proposed that greater coping resources (eg. higher education, employment, greater material resources and better general health) would be positively associated with problem-focused coping and negatively associated with emotion-focused coping.

## Methods

### *Design*

Self-administered cross-sectional questionnaire survey.

### *Settings*

Study settings and procedures have been described in detail elsewhere (2). In brief, the survey was conducted in 24 randomly selected general practices in St Petersburg, Russia in April-October, 2007. A female researcher approached potentially eligible patients in waiting areas, checked their eligibility, told the women about the study, and sought their written informed consent. Women who consented to participate in the main study completed numerous standardized questionnaires. Every fifth woman who consented to participate in the main study was invited to take part in an additional psychological sub study by completing a psychological questionnaire on coping behavior.

### *Participants*

Participants for the present study were systematically sampled from 1232 patients who participated in a study on prevalence and associations of IPV in Russian general practice (2). Inclusion criteria were female, age 15-70 years old, presence in a surgery without a child aged  $\geq 3$  years or male attendant, and ability to complete a questionnaire survey.

### *Main outcome measures*

*Ways of coping with stressful situations involving intimate partners.* The Russian version of the Ways of Coping Questionnaire (WCQ-R) was used to measure ways of coping employed by women in stressful situations involving their intimate partners. WCQ-R is a 50 item self-report check list within eight empirically derived subscales, which assesses thoughts and actions individuals use to cope with the stressful encounters of everyday living. The questionnaire has demonstrated fair reliability (e.g., Chronbach's alphas range from 0.39 to 0.62) and validity in a number of different Russian samples (26, 27). Participants were asked how often they generally employed different coping efforts in response to stressful situations involving their intimate partners. All responses were ranked from 0 = "Does not apply or not used" to 3 = "Used a great deal". Four WCQ-R subscales (Confrontive coping,

Seeking social support, Planful problem solving, and Accepting responsibility, 22 items in total) were used to measure problem-focused ways of coping. The four remaining subscales (Escape-avoidance, Distancing, Positive reappraisal, and Self-controlling, 28 items in total) were used to measure emotion-focused ways of coping. Raw scores were calculated separately for problem- and emotion-focused ways of coping (19, 21, 28).

*IPV.* The Russian version of the Composite Abuse Scale (CAS-R) was used to identify women who have ever experienced IPV (2, 29). CAS-R is a self-report measure that provides standardized subscale scores on four dimensions of IPV. It consists of 30 items presented in a six point frequency scale (0 = Never, 5 = Daily) in a 12 month period of an adult intimate relationship in the present or in the past. The Severe Combined Abuse (SCA) subscale has 8 items that represent severe physical abuse items, all sexual abuse items, and the physical isolation aspect of emotional abuse. The Emotional Abuse (EA) subscale has 11 items that include verbal, psychological, dominance and social isolation abuse items. The Physical Abuse (PA) subscale has 7 of the less severe physical abuse items and the Harassment (H) subscale has 4 items concerning actual harassment. Using the four subscales, cut-off scores and categorisation process from the CAS manual, respondents were categorized according to their experience of IPV into five groups: (1) CAS-R-negative non-abused reference group, (2) Emotional Abuse and/or Harassment only (EA/H/Both), (3) Physical Abuse alone (PA), (4) Physical Abuse in combination with Emotional Abuse and/or Harassment (PA&EA&H), and (5) Severe Combined Abuse (SCA) (29).

*Coping resources.* Personal coping resources included general health perception. Respondents were asked to rate their general health (Poor/Fair/Good) and number of diagnosed chronic health conditions (None/One/Two or more). Material coping resources included level of education (High school not completed/High school completed), employment status (Employed/Unemployed), and a car in household (Yes/No) as a proxy for personal income.

### *Analysis*

The primary outcomes were problem-focused and emotion-focused ways of coping as measured on the WCQ-R subscales in units. The explanatory variables were (1) a life-time experience of EA/H/Both, PA alone, PA&EA&H, and SCA and (2) coping resources. Life-time exposure to the four

different types of IPV was treated as binary variables derived from the CAS-R subscales. Binary variables representing coping resources were considered as potential effect modifiers.

Descriptive statistics were used to characterise the sample. Independent-samples t-test for age and Pearson's chi-squared test for all categorical variables were used to assess differences between the psychological subsample and main sample. Coping outcomes were analysed using complete cases only (completed WCQ-R without missing data). Cronbach's alpha was used to assess the internal consistency of the WCQ-R. The association between IPV and ways of coping was investigated using linear regression. First univariable regression was run to examine associations between the four types of IPV and ways of coping. Then, the confounding variable - marital status, and potential mediating variables – coping resources were added to the regression model. Marital status was selected as a possible confounder on the basis of previous analysis in the main study (2). Regression coefficients of the effect of IPV on coping outcomes were compared between regression models with and without the inclusion of the confounding and modifying variables.

## **Results**

### *Participants*

In total, 246 female patients were invited to complete the additional psychological questionnaire, WCQ-R. Nearly 91% (223/246) of the invited women consented to this and 180 out of 223 (80.7%) returned the completed WCQ-R. Twenty-one psychological questionnaires contained missing data, resulting in 159 complete cases.

Ages of women in the psychological subsample ranged from 18 to 67, with a mean age of 38, SD 14 years. Women from the psychological subsample were younger than women from the main sample ( $M = 45$ ,  $SD = 15$ ),  $t(1197) = 5.4$ ,  $p = 0.00$ . Categorical characteristics of the psychological subsample and the main sample are compared in Table 1. More women from the psychological subsample completed high school ( $\chi^2(1) = 4.2$ ,  $p = 0.04$ ), had job ( $\chi^2(1) = 6.3$ ,  $p = 0.01$ ), were in current intimate relationships ( $\chi^2(1) = 5.02$ ,  $p = 0.03$ ) and did not have children ( $\chi^2(1) = 24.2$ ,  $p = 0.00$ ). Equal proportions of women who enrolled in the main study and women who enrolled in the psychological sub study were married, lived with their intimate partners and owned a car. Women



from the psychological subsample more frequently classified their health as good ( $\chi^2 (2) = 13.6, p = 0.00$ ) and reported fewer chronic diseases ( $\chi^2 (2) = 14.0, p = 0.00$ ) than women from the main sample. Patients from the psychological subsample and from the main sample had equal life-time prevalence of IPV ( $\chi^2 (4) = 5.5, p = 0.24$ ). SCA was the most prevalent type of IPV reported by women from the psychological subsample (34.0%, 95% CI 27.0 to 41.7), followed by EA/H/Both (14.5%, 95% CI 9.8 to 20.9), PA&EA&H (9.4%, 95% CI 5.8 to 15.1), and PA alone (4.4%, 95% CI 2.1 to 9.0).

### *Outcomes*

Table 2 describes the eight WCQ-R subscales, internal consistency coefficients and raw coping scores. In the current study, four out of eight subscales (confrontive coping, accepting responsibility, escape-avoidance and self-controlling) had Cronbach's alphas below 0.65. The Cronbach's alpha for the whole WCQ-R was 0.87; Cronbach's alphas for both emotion-focused and problem-focused ways of coping was 0.79.

### *Life-time exposure to IPV and ways of coping with stressful situations involving intimate partners*

The univariable analysis supported our first hypothesis that patients with experience of IPV use problem-focused and emotion-focused coping as frequently as patients without such experience. When we compared each abused group in turn with non-abused reference group, we found no association between the mean problem-focused scores and life-time history of EA/H/Both (difference 0.2, 95% CI: -4.2, 4.7;  $p = 0.92$ ), PA alone (difference 4.7, 95% CI -2.5, 11.9;  $p = 0.20$ ), PA&EA&H (difference 3.7, 95% CI -1.5, 8.9;  $p = 0.16$ ), and SCA (difference 1.6, 95% CI -1.8, 5.0;  $p = 0.35$ ) (Table 3). There was no evidence of a difference in mean emotion-focused coping scores between patients with the four types of IPV experience and those with none.

### *Association between IPV, coping resources and ways of coping with stressful situations involving intimate partners*

The multivariable linear regression did not support our second hypothesis that coping resources change the relationship between IPV and ways of coping. With adjustment for marital status and coping resources, mean scores in problem-focused coping were 0.7 – 6.2 units higher in those

patients who had experienced the four types of IPV compared to those who had not (all four 95% CI included 0: -1.4, 13.7, p ranged from 0.11 to 0.77) (Table 3). After adjustment for marital status and coping resources there was no evidence for an association between emotion-focused coping and IPV.

To conclude, there was no evidence of associations between IPV and ways of coping either before or after adjustment for coping resources.

## **Discussion**

### *Summary of main findings*

This is the first paper examining problem-focused and emotion-focused coping with stressful situations involving intimate partners employed by women consulting in general practice. The aim of this study was to compare ways of coping of patients who had experienced IPV with those who had not experienced IPV. We found no significant differences in ways of coping with stressful situations involving intimate partners between the groups. The results supported the first hypothesis that patients who have experienced EA/H/Both, PA, PA&EA /H, or SCA reported similar levels of problem-focused and emotion-focused coping as patients who have not experienced IPV. Contrary to the second hypothesis, completed high school, employment and better general health were not associated with higher levels of problem-focused coping and lower levels of emotion-focused coping. Our findings suggest that women who had experienced IPV were equally likely to employ either way of coping when it came to dealing with stressful situations involving their intimate partners. Our study shows that patients who had experienced IPV used problem-focused ways of coping as much as patients who had never experienced IPV.

### *Comparison with existing literature*

When relating our findings to published papers on coping and IPV, we focused on studies which measured coping in problem-/ emotion-focused dimensions (14, 26). Our findings are in line with Lilly and Graham-Bergman (21), who have reported that women using specialist domestic violence services frequently employ both problem-focused and emotion-focused ways of coping. Our results differ from studies on low income African American patients in US public health services (16) and refugee residents (15, 19). We did not find the direct association between severe abuse and emotion-

focused coping reported by Lilly and Graham-Bergman (21). Neither did we find an association between coping resources and ways of coping, which contradicts the results of a survey in a sample of refuge residents and community controls (19).

It is possible that we did not find the association between IPV and coping due to our sample being drawn from general practice. It is widely accepted that coping may change over the course of a violent relationship. We know that women who seek refuge accommodation differ from the population of IPV survivors as a whole in terms of IPV severity, levels of traumatisation, stages in abusive relationships, and resource accessibility (14). Another explanation could be Russian cultural differences, which make our sample not comparable with the samples from US and Israel. Authors of the Russian-language adaptation of the WCQ conducted qualitative interviews and found that Russian participants reported ways of coping with stress that were not assessed by the WCQ-R (27). A third possible explanation may be methodological. In the current study, patients were asked to choose the coping strategies they usually use when dealing with stressful situations involving their intimate partners. Thus, it is possible that IPV-positive women linked their responses to IPV-related situations due to the traumatic nature of those, whereas IPV-negative women linked their responses to a wider variety of situations.

### *Study limitations*

Our findings have the following limitations. First, in this study four out of eight subscales of the WCQ-R had levels of reliability below minimally acceptable (30). Second, retrospective data collected through self-administered questionnaire survey could be biased by problems of memory, the desire of participants to present themselves in a positive way, and language ambiguity. Third, the sample was drawn from a group of women attending general practices in one Russian city; therefore it is not representative of all female patients in Russian general practice. Finally, although we tried to gather a representative subsample for this study by giving every fifth women in the main study an equal chance to fill in an additional psychological questionnaire, that may not have been achieved. Furthermore, we excluded from the analysis twenty one cases with incomplete WCQ-R. We found that patients in the psychological subsample were younger, healthier, better educated and employed than patients in the main study. Therefore our results are slightly biased towards the younger women.

In conclusion, our research findings cannot be generalised without caveats to the majority of women attending general practice in a major Russian city.

#### *Implications for clinical practice*

Our results suggest that patients who had experienced IPV have normal heterogeneous ways of coping with stressful situations involving intimate partners. These findings should be incorporated into IPV training for general practitioners to address their stereotypes about the coping behaviour of abused women. Health care professionals' perception of women survivors of IPV as passive victims may be a barrier to offering support. Understanding that these patients have normal ways of coping with stressful situations involving intimate partners may increase the confidence of general practitioners to engage with women who have experience or are experiencing IPV. Further research is required to assess whether IPV training for general practitioners improves not only identification and referral to specialist domestic violence agencies, but also results in better clinical outcomes for patients.

#### *Declarations*

Ethical approval was granted by the Local Ethical Committee of the North-Western Medical University named after I.I. Mechnikov in St Petersburg, Russia [approval number 2, 14 April, 2007]

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The authors have stated that there are no potential, perceived, or real conflicts of interest for each author.

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**Table 1. Descriptive statistics of psychological subsample (n = 159) and main sample (n = 1,042)**

<b>Variable</b>	<b>Categories</b>	<b>Psychological subsample, n (%)</b>	<b>Main sample, n (%)</b>	<b>p</b>
Education	High school not completed	22 (13.8)	214 (20.8)	0.04
	High school completed	137 (86.2)	814 (79.2)	
Employment	Unemployed	34 (21.4)	325 (31.2)	0.01
	Employed	125 (78.6)	717 (68.8)	
Personal income	No car in household	76 (48.1)	533 (51.3)	0.45
	Car in household	82 (51.9)	506 (48.7)	
Currently in intimate relationship	Yes	111 (69.8)	629 (60.6)	0.03
	No	48 (30.2)	409 (39.4)	
Living with	Intimate partner	87 (54.7)	601 (58.0)	0.30
	Separately	52 (32.7)	280 (27.0)	
	Other	20 (12.6)	155 (15.0)	
Marital status	Never married	1 (0.10)	1 (0.1)	0.31
	Married	95 (59.8)	622 (59.9)	
	Separated/divorced/widowed	63 (39.6)	416 (40.1)	
Children	No	69 (43.4)	258 (24.8)	0.00

Variable	Categories	Psychological subsample, n (%)	Main sample, n (%)	p
Health status	Yes	90 (56.6)	784 (75.2)	0.00
	Poor	12 (7.6)	173 (16.6)	
	Fair	98 (61.6)	652 (62.6)	
	Good	49 (30.8)	217 (20.8)	
Number of chronic diseases	None	65 (40.9)	304 (29.3)	0.00
	One	47 (29.6)	271 (26.1)	
	Two or more	47 (29.6)	463 (44.6)	
Life-time IPV	None	60 (37.7)	480 (46.3)	0.24
	Emotional Abuse and/or Harassment	23 (14.5)	137 (13.2)	
	Physical Abuse	7 (4.4)	38 (3.7)	
	Physical and Emotional Abuse	15 (9.4)	107 (10.3)	
	Severe Combined Abuse	54 (34.0)	275 (26.5)	

Note. IPV – Intimate partner violence; p - significance level for the Pearson's chi-squared test.

**Table 2. Cronbach's alphas, means and standard deviations of raw scores as measured by the Russian version of the Ways of Coping Questionnaire (n = 159)**

WCQ – R subscale	Cronbach's alpha	Mean score	SD	Min	Max
<b>Problem-focused ways of coping</b>					
Confrontive coping (6 items, max score 18):					
aggressive efforts to alter the situation with some degree of hostility and risk-taking: <i>"I stood my ground and fought for what I wanted"</i>	0.49	8.4	3.2	0	18
Seeking social support (6 items, max score 18):					
effort to seek information support, tangible support and emotional support: <i>"I got professional help"</i>	0.71	9.8	3.5	1	18
Planful problem solving (6 items, max score 18):					
deliberate problem-focused efforts to alter the situation, coupled with an analytic approach to solving the problem: <i>"I made a plan of action and followed it"</i>	0.70	10.5	3.5	0	18
Accepting responsibility: (4 items, max score 12):					
acknowledgment of one's role in the problem with a concurrent theme of trying	0.57	6.5	2.6	1	12

WCQ – R subscale	Cronbach's alpha	Mean score	SD	Min	Max
to put things right: <i>"I promised myself that things would be different next time"</i>					
Problem-focused coping total (22 items, max score 66): directed towards changing a stressful situation	0.79	35.3	9.1	5	54
Emotion-focused ways of coping					
Escape-avoidance (8 items, max score 24): wishful thinking and behavioural efforts to escape or avoid the problem: <i>"I hoped for a miracle"</i>	0.56	10.6	4.1	0	19
Distancing (6 items, max score 18): cognitive efforts to detach oneself and to minimise the significance of the situation: <i>"I didn't let it get to me; I refused to think too much about it"</i>	0.65	9.1	3.6	0	18
Positive reappraisal (7 items, max score 21): efforts to create positive meaning by focusing on personal growth: <i>"I rediscovered what is important in life"</i>	0.73	11.5	4.3	0	21
Self-controlling (7 items, max score 21): effort to regulate one's feelings and emotions: <i>"I kept others from knowing how bad things were"</i>	0.47	12.9	3.1	0	20

<b>WCQ – R subscale</b>	<b>Cronbach's alpha</b>	<b>Mean score</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
Emotional-focused coping (28 items, max score 84):					
directed towards changing the way one thinks or feels about a stressful situation	0.79	44.1	10.8	3	69

Note: WCQ – R – the Russian version of the Ways of Coping Questionnaire; SD – standard deviation; Min – minimum score; Max – maximum score

**Table 3. Linear regression model with the type of IPV as the predictor of ways of coping (n = 159)**

Variables included in the model	Problem-focused coping, score difference		Emotion-focused coping, score difference	
	$\beta$	p	$\beta$	p
	(95% CI)		(95% CI)	
Emotional Abuse and/or Harassment – unadjusted	0.2 (-4.2, 4.7)	0.92	4.2 (-1.1, 9.4)	0.12
Emotional Abuse and/or Harassment - adjusted	0.7 (-3.9, 5.2)	0.77	5.0 (-0.3, 10.3)	0.07
Physical Abuse - unadjusted	4.7 (-2.5, 11.9)	0.20	2.4 (-6.1, 11.0)	0.57
Physical Abuse - adjusted	6.2 (-1.4, 13.7)	0.11	3.9 (-4.9, 12.7)	0.38
Physical Abuse in combination with Emotional Abuse and/or Harassment - unadjusted	3.7 (-1.5, 8.9)	0.16	3.1 (-3.0, 9.3)	0.32
Physical Abuse in combination with Emotional Abuse and/or Harassment - adjusted	4.3 (-1.2, 9.7)	0.13	3.8 (-2.6, 10.2)	0.25
Severe Combined Abuse - unadjusted	1.6 (-1.8, 5.0)	0.35	2.5 (-1.5, 6.5)	0.21
Severe Combined Abuse - adjusted	2.0 (-1.6, 5.6)	0.27	2.6 (-1.6, 6.8)	0.22

Note. IPV – Intimate partner violence; CI – confidence interval;  $\beta$  = regression coefficient (difference in mean scores); the model was adjusted for marital status and for coping resources (education, employment, income, health status)